

# **Marathons** – *A Tale of Two Cities and the Running of a Planned Mass Casualty Event*

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# Presentation Overview

- Planned Disaster Concept
- Groundwork
- Collaboration
- Planning
- Execution
- Evaluation and Analysis





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# Special Events as Planned Disasters

## CONCEPT







# Concept

## *Special Events: Sharing the Characteristics of a Major Incident*

- Special Events (“High Threat Incidents”)
  - Draw large crowds
  - Require above normal resource commitments by emergency responders
  - Special circumstances, such as heat, cold, exertion, substance abuse, and others present responders with real (not simulated) opportunities to perform interventions on a large number of patients
  - Frequently result in a high number of casualties
  - Excellent opportunities to exercise disaster, large-scale, and mass-casualty incident plans







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# Special Events as Planned Disasters

## *GROUNDWORK*







# Groundwork

- Plans must be in place
  - Communications
  - Notifications
  - Operations
    - Mass-casualty
    - Mass-evacuation
    - Pharmaceuticals/  
Prophylaxis Distribution
    - Fire suppression
    - Other consequence  
management
- Partnerships need to be developed





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# Special Events as Planned Disasters

## *COLLABORATION*







# Collaboration



- During an actual major incident, no one agency works alone
- Agencies have unique responsibilities
- Agencies must know how cooperating agencies will respond







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# Collaboration

## *Working Together*

Utilize special events and drills as opportunities to plan & train together so that you may **institutionalize 'working together'**.

People and agencies will fall back on what they know during emergencies. Through building necessary actions and protocols into regular operations, we become better prepared.





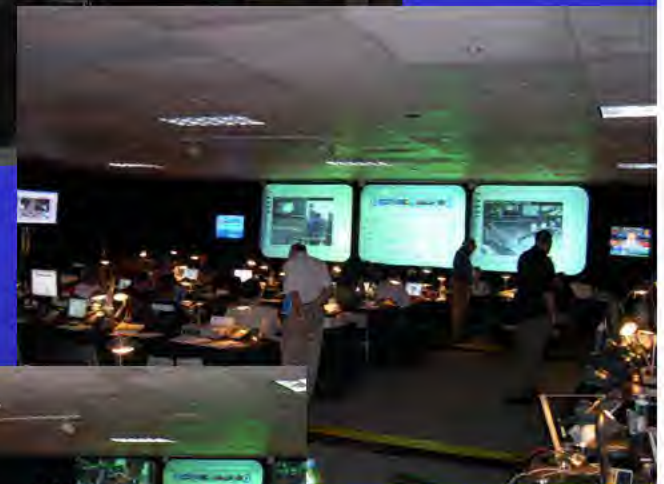
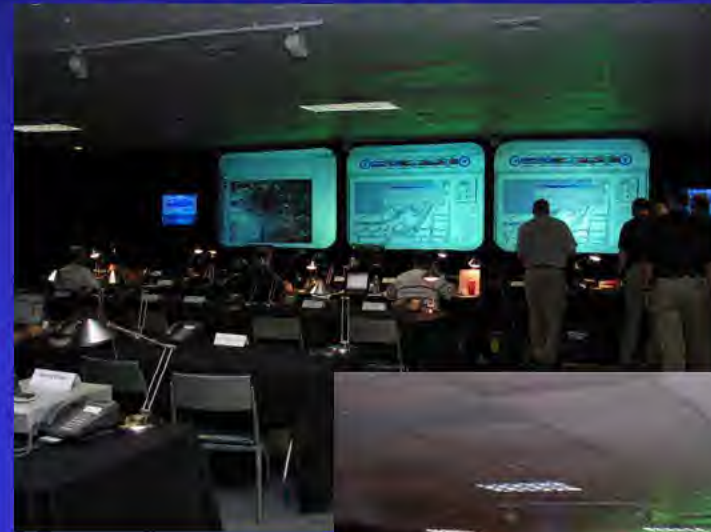


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# Collaboration

## *Unified Command*

- Jurisdictions talk about unified command often
- Plan to implement a unified command structure for your planned disaster
- Consider opening a unified command center







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# Collaboration

## *Working with the Media*

Their mission is to get a story. Building a longstanding relationship with journalists and reporters ensures that they get the right story and that they serve as a resource when needed.







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# Special Events as Planned Disasters

## *PLANNING*







# Planning

- Interface and integrate with the event organizers
- Bring the right people to the table
- Develop a mission
- Develop specific and measurable objectives
- Decide the elements of your plan you want to focus on exercising
- Determine what partners you want to include in your exercise
- Be ambitious, but be realistic







# Planning

## *Assess Potential Threats*

- Determine what could go wrong and what would be done to minimize risk, injury, and/or damage.
- Ex: How would you shelter marathon runners if there was a hurricane?







# Planning *Special Operations*







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# Boston EMS – Tango Trucks (3)

- Tyvek Suits
- Backboards
- Stretchers
- Defibrillator
- Ladder
- Blocks
- O2 Tanks
- Multitators
- Mark 1
- etc....







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# Boston EMS – Gators & Golf Carts





# Boston EMS - Bicycles







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# Planning

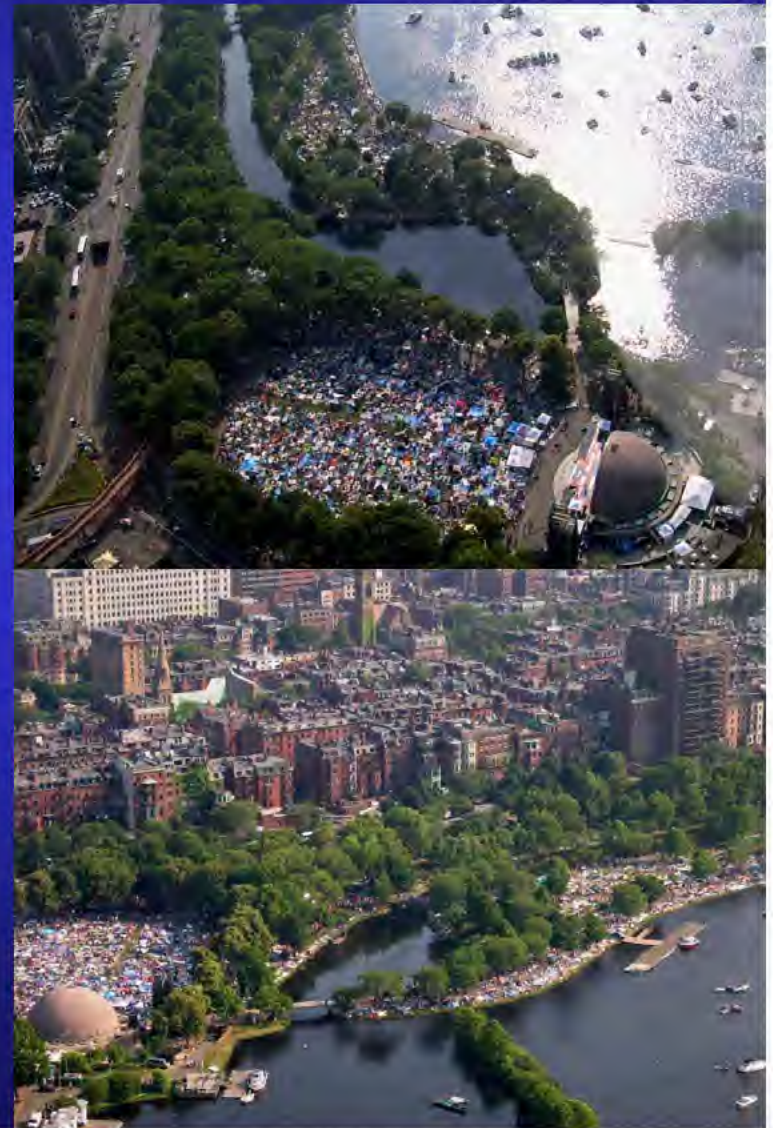
## *Incident Command*

### Incident Command System (ICS)

- Incident Commander
- Command staff
- General staff
- Appropriate branches
- Pre-designated task forces
- De-escalation
- Call sign usage

### Unified Command

- Develop structure in advance
- Explain the concept
- Build relationships with cooperating agencies





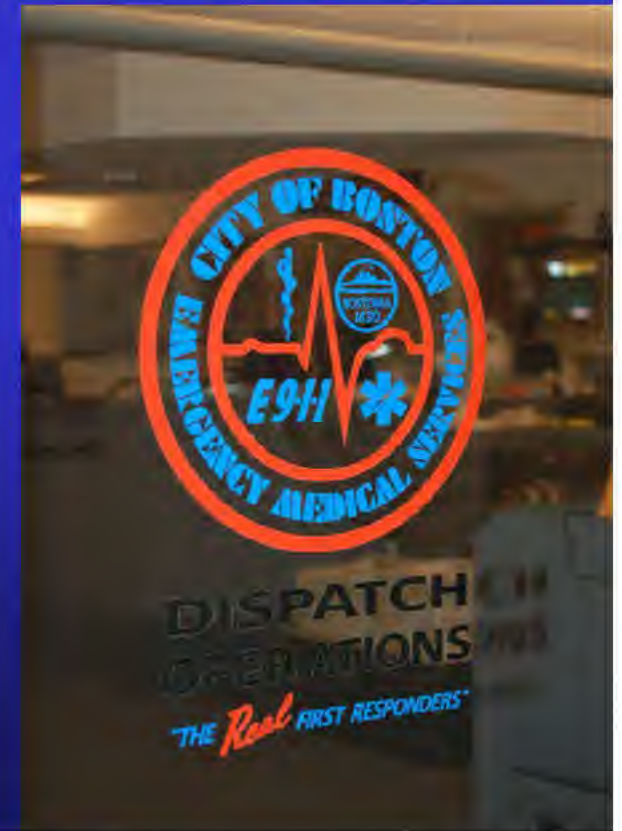


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# Planning

## *Communications*

- Interoperable communication across agencies & jurisdictions
- Consider a tactical frequency
- Dedicate a dispatcher for large events
- Utilize earpieces







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# Planning

## *Access and Egress*

- Cordon-off evacuation routes around congested areas
- Make use of aerial views for planning
- Escalate resource commitments around busy event periods







# Planning

## *Event Escalation*

- Assign personnel to busy areas but bear access and egress in mind
- De-mobilize resources as the event de-escalates
- If there is a mass exodus, consider impact units around heavy exodus zones
- Delicate balance: maintaining citywide coverage during major events
- “Life goes on...” while “everyone” is at the event







# *EXECUTION*

## Special Events as Planned Disasters







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# Execution

- Proactive action (for heat or cold)
  - Mount a coordinated risk communication campaign using media outlets before and during the event
  - Encourage runners & revelers to wear sunscreen, stay hydrated, etc.
  - Develop hot-weather safety tips pocket cards and magnets



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## Boston EMS

Thomas M. Menino, Mayor of Boston

### Hot Weather Safety Tips



#### DO

- **DO** Drink lots of water and sports drinks
- **DO** Wear loose fitting, light weight, light colored clothing
- **DO** Check on elderly persons
- **DO** Use SPF 15 or higher sunblock and wear a hat
- **DO** Rest often in shady areas
- **DO** Go to an air conditioned place such as a shopping mall during severe heat
- **DO** Listen to the news and public announcements for heat advisories

#### DON'T

- **DON'T** Underestimate the seriousness of heat-related emergencies!
- **DON'T** Leave children or pets unattended in a vehicle
- **DON'T** Drink alcoholic or caffeinated beverages
- **DON'T** Stay in the hot weather if you feel sick
- **DON'T** Overexert yourself or work outside without taking frequent breaks
- **DON'T** Hesitate to call EMS and seek medical attention!

EMERGENCY - EMS, Fire, Police  
Dial 9-1-1







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# Execution

- Incident Action Plan developed in advance
- Mobilization details, demobilization details
- Coverage assignments
- ICS call signs, grid map locations, contingency plans, pertinent appendices
- BEMA and BFoJ or BAA coordinate inter-agency planning

CALLSIGN	POST	DAY	DAY	DAY	EVE	EVE	EVE	CLASS	COMMENTS
	LOCATION	PERSONNEL	PERSONNEL	SHIFT	PERSONNEL	PERSONNEL	SHIFT		
1	I/C	Sarno						C-1	
2	EVENT OPS	Hickey						C-1	
3	Z1 / OPS	Hatch Shell Parameter	Lawlor					C-18	
4	Z2 / OPS	Fendler Funderstage / West	G. Murphy					C-20	
5	Z3 / OPS	Charles River Island	Scarna					C-22	
6	ADMIN	Acres						T084	
7	LOGOFF	Haley						T0411	
8	COMOFF	Kearney						C-19	
9	RESOURCE	O'Connor						C-21	
10	UCC	118 BEACON	Newbe	McDevland	0800 - 0000			1 E-1 LT	
11	ALPHA MO	Map Grid / (J - 12)	Dr. Oyer		0800 - 0000			MD-11	
12	A-STAT	Map Grid / (J - 12)	J. Thomas	J. Stratton	0800 - 0000	J. Doyle	0800 - 0000	2 E-1 P	
13	A TEAM	Map Grid / (J - 12)	Locke	S. O'Brien	0800 - 0000			2 E	
14	BRAVO MO	Map Grid / (I - 5)	Dr. Jones		0800 - 0000			MD-16	
15	B-STAT	Map Grid / (I - 5)	Tynes	Finn	0800 - 0000	Anderson	0800 - 0000	2 E-1 P	
16	B TEAM	Map Grid / (I - 5)	Class	Saine	0800 - 0000			2 E	
17	CHARLIE MO	Map Grid / (G - 16)	Dr. Lugo		0800 - 0000			MD-16	
18	C-STAT	Map Grid / (G - 16)	DeVries	Wiley	0800 - 0000	Rappaport	0800 - 0000	2 E-1 P	
19	C TEAM	Map Grid / (G - 16)	Dear	D. Elstathou	0800 - 0000			2 E	
20	D-STAT	Map Grid / (P - 18)				P. Sullivan	1600 - 0000	1 E-1 P	
21	FIEDLER MO	Map Grid / (K - 15)	Dr. Meyer		0800 - 0000			MD-1	
22	F-STAT	Map Grid / (K - 15)	Arroyo	Loward	0800 - 0000	Nassan	0800 - 0000	2 E-1 P	
23	F TEAM	Map Grid / (K - 15)	Rimas	John Ahern	0800 - 0000			1 E-1 P	
24	H TEAM	Map Grid / (G - 17)				C. Lee	1500 - 0000	1 E-1 P	
25	J TEAM1	Alpha Station - West				M. Sullivan	1500 - 0000	1 E-1 P	
26	J TEAM2	Charlie Station - East				Monry	1500 - 0000	1 E-1 P	
27	ROMEO MO	Map Grid / (Q - 18)	Dr. Binnafeld		0800 - 0000			MD-2	
28	R-STAT	Map Grid / (Q - 18)	Coffi	Durfee	0800 - 2100	Cavalieri	0800 - 0000	2 E-1 P	
29	R TEAM	Secure Zone 1	Kanevich	S. Murphy	0800 - 0000			2 E	outside perimeter
30	RIVER RES1	Charles River	A. O'Brien	Hickey	0800 - 0000			1 E-1 P	
31	TANGO 10	Event Wide						1 E - 2 E	
32	AMB 30		Canavan	McCormack	0800 - 0000			2 E	
33	AMB 31		Daniel	Taylor	0800 - 0000			2 E	
34	AMB 32		Harding	Uma	0800 - 0000			2 E	
35	AMB 33		George	King	0800 - 1000	Hess	Allen	1500 - 0000	2 E
36	AMB 34		Saffly	McCarthy	0700 - 1500			1500 - 0000	2 E
37	AMB 35		Hamford	Marselle	1000 - 1600			1500 - 0000	2 E
38	P-57 / A-54	ALS / BLE	Saffer	McHugh	0800 - 1600			1500 - 0000	2 E
39	PMED 16		O'Hare	GB	0600 - 0100	City Service	0700 - 0100	2 P	
40	PMED 32		Zemina	Cavino	0900 - 0000			2 P	
41	PMED 56		Dwyer	Mitchell	0800 - 0000			2 P	
42	DIV 3	Event Wide	Pomposno		0730 - 2330			1 LT	
43	TANGO 1	Event Wide	Spelman		0800 - 0000			2 E	
44	VIC 1	Event Wide							
45	VIC 2	Event Wide							
46	VIC 3	Event Wide							
47	X-RAY1	Unit Supervisor	Grew		0800 - 0				
48	X-RAY2		Hernandez		0800 - 0				
49	X-RAY3		Beyer		0800 - 0				
50	X-RAY4		S. Elstathou		0800 - 0				
51	X-RAY5		D. Williams		0800 - 0				
52	X-RAY6				0800 - 0				
53	X-RAY7		Nichols		0800 - 0				
54	X-RAY8		Aulio		0800 - 0				
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# Mapping

- Scaled maps for the event, specialized for a specific purpose
  - Improved upon each year
- All maps are based on consistent grid coordinates
  - Makes dispatching simple and efficient
  - Zone designations for incident reporting

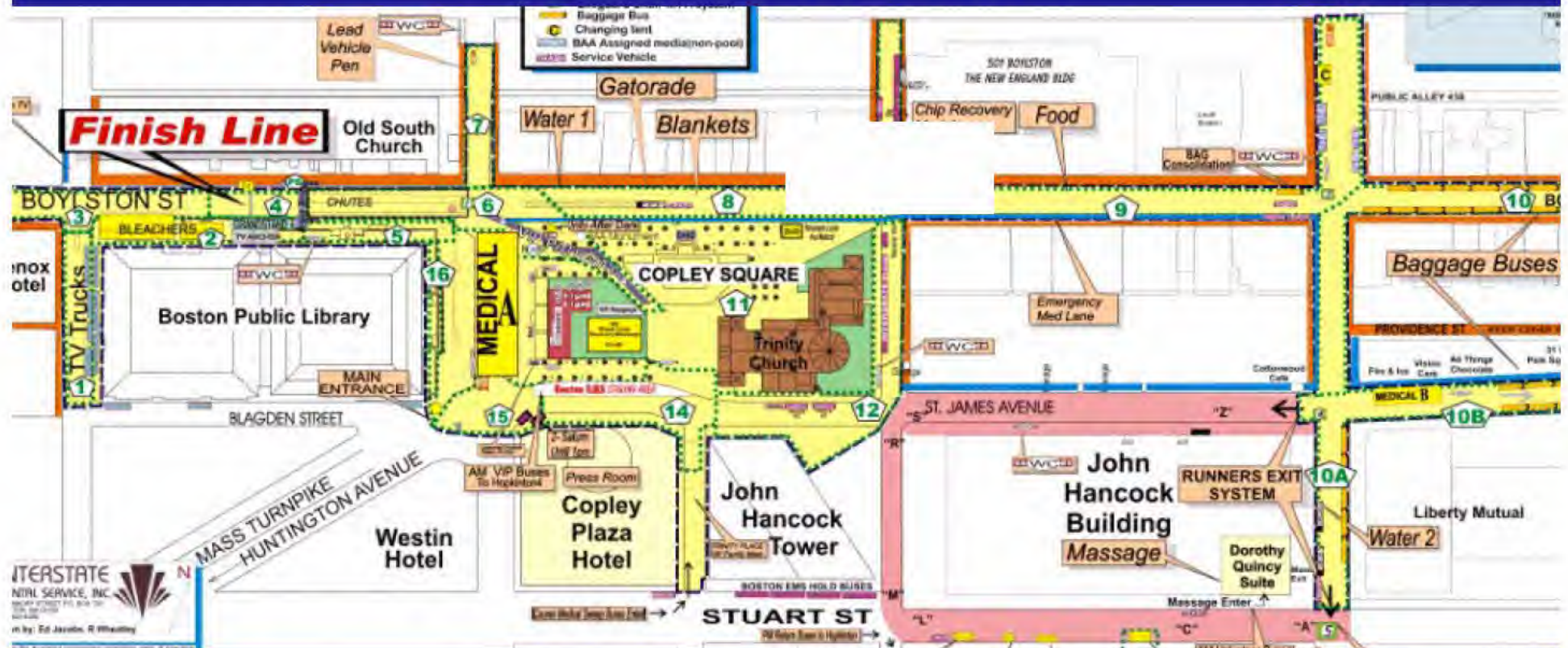






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# Mapping Boston Marathon



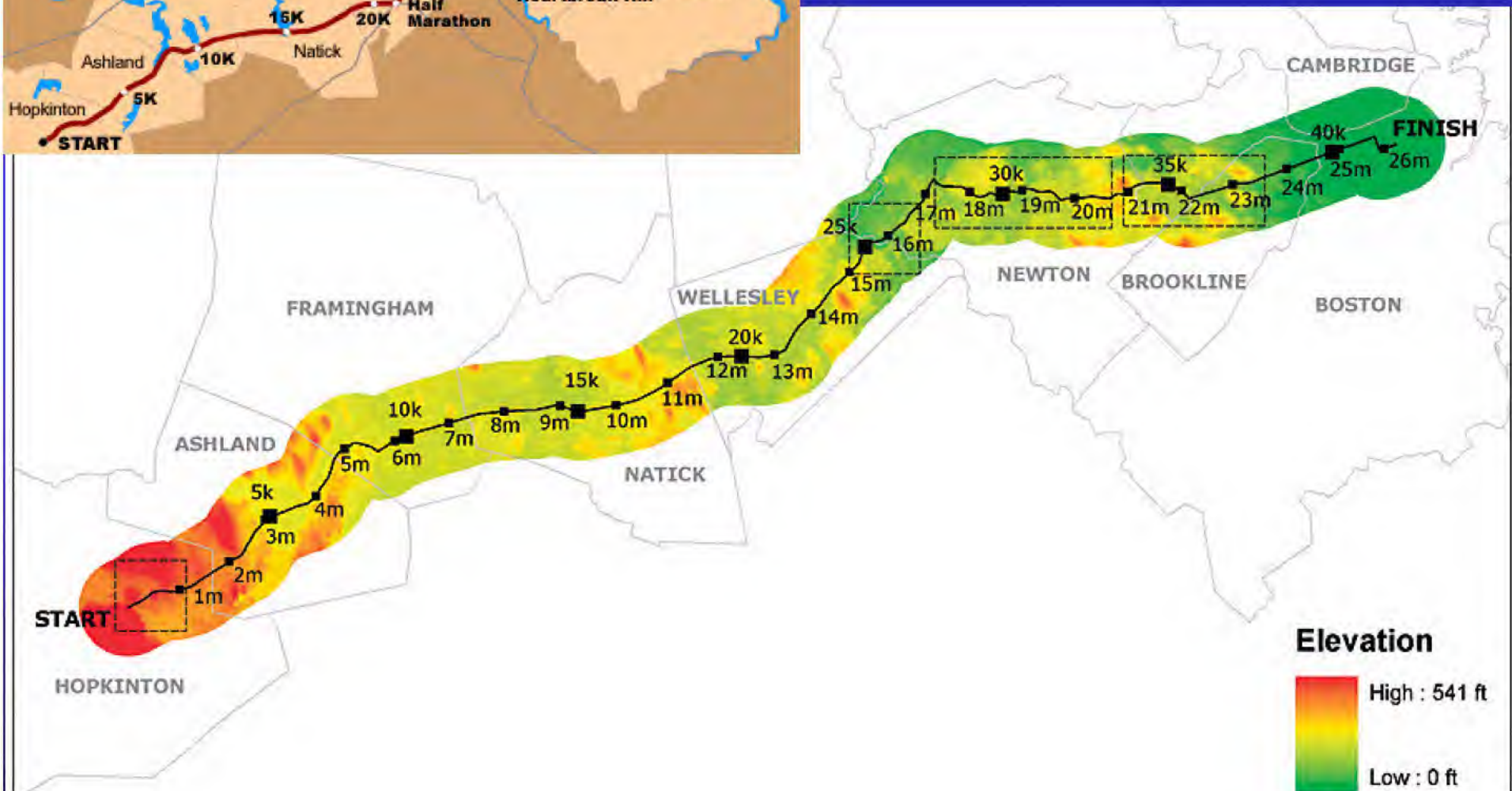




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# Mapping Boston Marathon

## Boston Marathon course







# Medical Response

- Much of the care rendered is the result of patients self-delivering to medical tents
- Large crowds present access issues for rapid responses for patients that cannot self-deliver
- Solution: Proceed Out and Rapid Response Teams
  - Gators
  - Bicycles
  - Fully staffed and equipped medical tents







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# Medical Response

- All tents can function near the capacity of an emergency room
  - Assorted medical supplies
  - Pharmaceuticals
  - Defibrillators
  - Re-hydration solution
  - Disaster supplies
- Physicians present at medical tents for close medical oversight and critical patients
- WMD CST and BFD partnered with for HazMat/MCI decontamination







# Medical Response *Patient Tracking*

- Using MMRS & UASI funding, Boston EMS has developed a Patient Tracking System for the Metro Boston Region.
- Patients tracked with unique barcodes on a web based system.
  - Location , status & unique ID are required fields.
  - Registered runners are preloaded in the system
- Special Events have been utilized to trial and evaluate the system.







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# Credentialing

## *For all Exercises & Special Events*

- All personnel pre-screened
- All personnel must go through credentialing process
- All personnel (even uniformed) must display credential at all times







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# Transferable Lessons

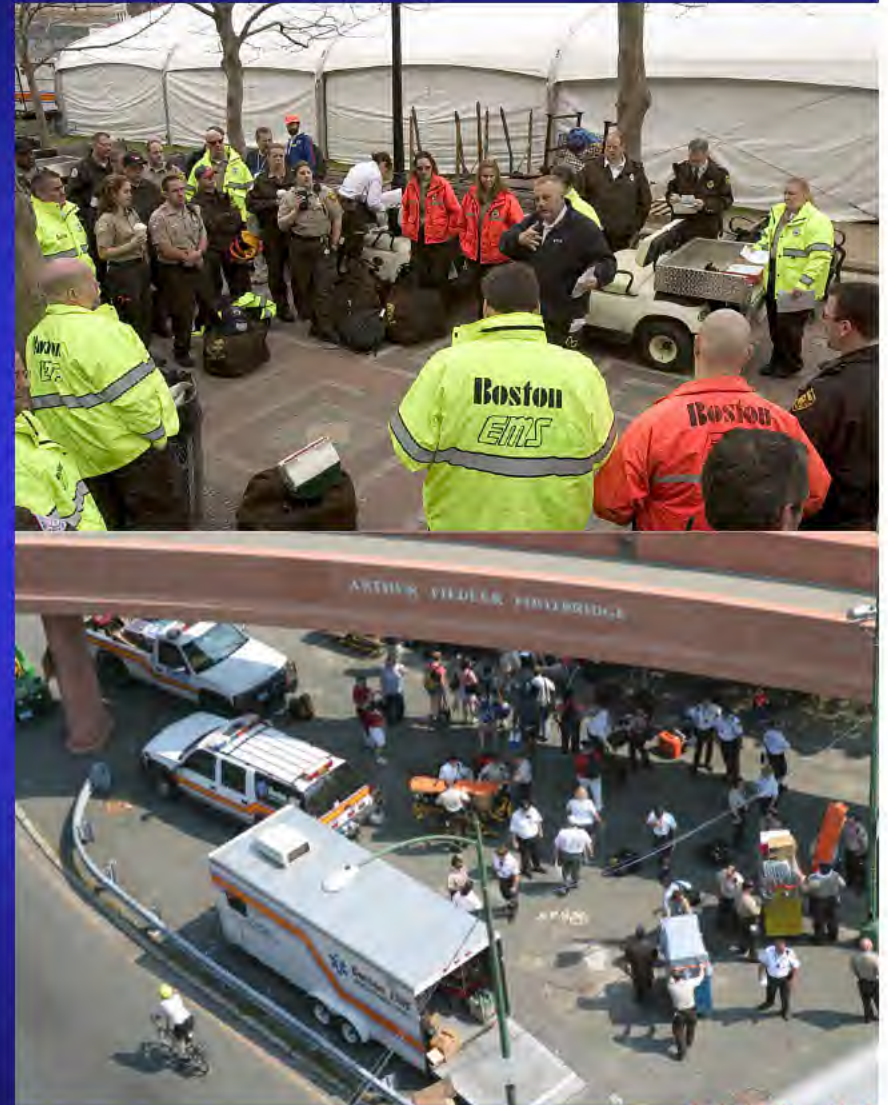
- Boston Marathon officials observe Boston Fourth of July operations (vice-versa)
- Over the years, lessons have been learned on both sides as to how to enhance operations safety





# Logistics Needs

- Food, ice, and water will all be needed during a major incident – special events are no different
- Distribution can be tricky, given all of the personnel to feed
- EMS cordons off our own logistics center







# Special Events as Planned Disasters

## *EVALUATION AND ANALYSIS*





# Evaluation and Analysis

After every major special event or incident, there are formal and informal discussions evaluating the response, what went well and areas for improvement.







# Evaluation and Analysis

- Each year is a learning experience
- Essential to take lessons learned from the planned disaster and integrate them into operational planning
- Analysis should be ongoing
- After-action reports are essential to effectively capture the successes and failures
- Develop action items







# Evaluation and Analysis

Due to the inherent similarity between the medical response for special events and disasters, we have seen a continual improvement in our emergency response capabilities as we prepare for and execute plans for special events.

For that reason, we consider any weakness in our response to a special event to be a weakness in our emergency preparedness capabilities, taking the utmost care to address such issues as soon as possible.







# Thank You

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